

IN THE CLAIMS

1 1. (Currently Amended) Non-human transgenic animal, being [~~transgenic~~] transgenic for
2 an anti-NGH (Nerve Growth Factor) antibody [~~or fragments thereof and~~] having a phenotype
3 reminiscent of a human [~~pathology~~] neurodegenerative syndromes, muscular atrophy or
4 dystrophy or immune disorders.

1 2. (Cancelled).

1 3. (Currently Amended) A non-human transgenic animal according to claim [2] 1
2 wherein the [~~human pathology is the~~] phenotype recapitulates the features of the human
3 Alzheimer disease (AD).

1 4. (Currently Amended) A non-human transgenic animal according to claim 3 exhibiting
2 at least one of the anatomical, histological, molecular or phenotypic markers included in the
3 following group: deposition in Central Nervous System (CNS) of plaques of amyloid precursor
4 protein (APP) or of β -amyloid protein, hyperphosphorylation of the tau protein, neurofibrillar
5 pathology, and deficits in the cholinergic system.

1 5. (Currently Amended) A non-human transgenic animal according to claim 4 further
2 exhibiting at least one of the anatomical, histological, molecular or phenotypic markers included
3 in the following group: glial activation, neuronal loss, cortical and hippocampal atrophy, and
4 muscular myositis.

1 6. (Currently Amended) A non-human transgenic animal according to claim 5 exhibiting
2 the following anatomical, histological, molecular or phenotypic markers: deposition in Central
3 Nervous System (CNS) of plaques of amyloid precursor protein (APP) or of β -amyloid protein,

hyperphosphorylation of the tau protein, neurofibrillar pathology, deficits in the cholinergic system, glial activation, neuronal loss, cortical and hippocampal atrophy, and muscular myositis.

7. (Currently Amended) A non-human transgenic animal according to claim 6 exhibiting the anatomical, histological, molecular or phenotypic markers as defined [~~in Table 1~~] by decrease of cortical thickness, hippocampal formation atrophy, ventricle dilation, cognitive deficits, neuronal loss, apoptosis, β -amyloid plaques, hyperphosphorylated tau, neurofibrillary tangles, tau aggregates, dystrophic neuritis, glial activation, cholinergic deficit, synaptic loss, decreased synaptic plasticity, skeletal muscle atrophy and dystrophy, amyloid deposits in skeletal muscles, hyperphosphorylated tau in skeletal muscles, inflammation in skeletal muscles, vacuolization of myofibers, increased number of central nuclei in myofibers, or spleen alterations.

8. (Original) A non-human transgenic animal according to claim 7 wherein said markers are expressed in the adult age.

9. (Original) A non-human transgenic animal according to claim 7 wherein the occurrence of the tau hyperphosphorylation and/or the β -amyloid protein deposition in the back or lower limb skeletal muscles and/or the atrophy of said skeletal muscles are present concomitantly to the earliest occurrence of other neurological markers.

10. (Cancelled)

11. (Original) A non-human transgenic animal according to claim 1 wherein the anti-NGF antibody blocks the binding of NGF to its receptors.

1 12. (Original) A non-human transgenic animal according to claim 1 wherein the anti-
2 NGF antibody is expressed mainly in adulthood

1 13. (Original) A non-human transgenic animal according to claim 12 wherein the anti-
2 NGF antibody levels in the serum of the adult animal are comprised between 50 ng/ml and 500
3 ng/ml.

1 14. (Currently Amended) A non-human transgenic animal according to claim [10] 1
2 wherein the anti-NGF antibody is the monoclonal anti-NGF α D11 antibody.

1 15. (Original) A non-human transgenic animal according to claim 14 wherein the α D11
2 antibody is a α D11 chimeric antibody.

1 16. (Original) A non-human transgenic animal according to claim 15 wherein the
2 chimeric antibody is a humanised chimeric antibody.

1 17. (Previously Presented) A non-human transgenic animal according to claim 1, wherein
2 the animal is a mammalian.

1 18. (Original) A non-human transgenic animal according to claim 17 belonging to the
2 murine genus.

1 19. A non-human transgenic animal according to claim 18 belonging to the *Mus musculus*
2 [~~BS6JL~~] B6SJL strain.

1 20-37.(Cancelled)